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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,518

06/26/2003

Takami Shibazaki

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23389

7590

05/03/2006

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EXAMINER

PATEL, SHEFALI D

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/606,518	Applicant(s) SHIBAZAKI ET AL.	
	Examiner Shefali D. Patel	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 21, 44 and 49 is/are rejected.
- 7) ☒ Claim(s) 3-20, 22-43 and 45-48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/26/03, 5/16/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of a Continuation application of PCT application No. PCT/JP01/10029, filed November 16, 2001 is acknowledged.

Information Disclosure Statement

2. The information disclosure statements filed on June 26, 2003 and May 16, 2005 have been considered in this application.

Drawings

3. Figure 17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (page 2 of the specification). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: On page 2 lines 11 and 26 should the element 508 be 580? If not, what is element 580 in the Figure 17? Element 580 is not disclosed in the specification under Background of the Invention where Figure 17 is disclosed.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 21, 44 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramm et al. (hereinafter, "Ramm") (WO 98/07022) in view of Dixon et al. (hereinafter, "Dixon") (WO 00/05571).

With regard to **claim 1** Ramm discloses a fluorescent intensity measuring method which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substrate (page 1 lines 14-22, also Figure 9), comprising: a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image (i.e., specific image) of each minute point including the fluorescent substance as a first image (page 30 line 37 to page 31 lines 1-2); a second imaging step of obtaining an image of foreign matter (i.e., non-specific image) adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance (page 30 lines 3-37 and page 31 lines 13-15); and a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask (page 31 lines 28-30). Ramm does not expressly disclose an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image. Ramm implicitly discloses this step. Dixon discloses a scanner scanning a substrate generating a digitized image and sending the image to a computer 103 (this process is binarizing the image). Ramm also does not disclose the image of foreign matter constituted by contaminants adhering on the substrates. Ramm discloses all the elements that are extraneous from the fluorescent specimens. Nonetheless, the problem of contamination is known in the art and Dixon discloses a microtiter plate reader (on page 21, lines 2-6), which is calibrated by eliminating from the image pixels deemed as unreadable because of contamination (page 23 line 30 to page 24 lines 1-21). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Dixon with Ramm. The motivation for doing so is to binarize the image by analyzing pixel as in Dixon to eliminate the foreign

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matter. Therefore, it would have been obvious to combine Dixon with Ramm to obtain the invention as specified in claim 1.

With regard to **claim 2** it would have been obvious matter of design choice to modify the Ramm reference by having an expansion step since applicant has not discloses that having this expansion steps solves any stated problem or is for any particular purpose and it appears that the acquiring non-specific bias and image in Figure 9 of Ramm would perform equally well with the expansion step for expanding the foreign matter area of the binarized image as recited in claim 2.

With regard to **claim 21** Ramm discloses a correction step of correcting the second image by using a reference image at element 220 and 224 in Figure 9 and its respective portions in the specification.

Claim 44 recites identical features as claim 2. Thus, arguments similar to that presented above for claim 2 is equally applicable to claim 44.

Claim 49 recites identical features as claim 1 except claim 49 is a system claim. Thus, arguments similar to that presented above for claim 1 is equally applicable to claim 49. Please note that Ramm discloses a system of claim 49 including a light source, wavelength selector and an imaging device.

Allowable Subject Matter

7. Claims 3-20, 22-43 and 45-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,262,837 – Fluorescent Microscope

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D. Patel whose telephone number is 571-272-7396. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shefali D Patel
Examiner
Art Unit 2624

April 17, 2006

JINGGE WU
PRIMARY EXAMINER

